REMARKS

Claims 16-32, 34 and 39-43 are currently pending in the application. Applicants have amended claims 16 and 29, canceled claim 33 and added new claims 39-43. Applicants request reconsideration of the application in light of the following remarks.

Rejections under 35 U.S.C. §102

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claims16-34 were rejected under 35 U.S.C. § 102(b) as being anticipated by Robinson et al. (hereinafter, the "SAE Technical Paper"). Applicants respectfully traverse this rejection and request reconsideration of the claims.

The Office Action references the SAE Technical Paper as the sole basis for the rejection of all of the claims. Applicant notes that Applicant, James W. Haskew, was also an author of that paper and was the designer and author of the drawings in Appendix A. *See* para. 2 of the Declaration of James Haskew under 37 C.F.R. 1.132 ("Haskew Declaration") attached to this Office Action response. In its text, the SAE Technical Paper only refers to Appendix A once (*see* page 4, the last sentence of the "Experimental Procedure" section). The paper says only "The proprietary blend of catalytic solutions was evenly dispensed using a bubble fractionation process as part of a patented design (see Appendix A)." The "patented design" referred to in this sentence is found in U.S. Patent 4,295,816 to Robinson et al. (Oct. 20, 1981). To Applicant's knowledge, the system shown in Appendix A was

never built or used in public. Appendix A was created solely as an example in the SAE Technical Paper. To Applicant's knowledge, this makes the SAE Technical Paper the extent of the disclosure relating to that system.

The SAE Technical Paper does not disclose a system wherein sparging gas is transported through the first transport path at the same time sparging gas is being transported through the second transport path. The striped hoses in the drawing of Appendix A illustrate that sparging gas will flow through only the first hose in low RPM and only the second hose in high RPM. The text of the SAE Technical Paper does not disclose any differently. Accordingly, because the SAE Technical paper does not disclose sparging gas being transported through the first transport path while sparging gas is also being transported through the second transport path, independent claims 16 and 29, and their respective dependent claims, are allowable over the SAE Technical Paper.

With reference to the Haskew Declaration attached to this Office Action response, Applicant has further indicated to his attorney that it is his recollection that there was a system distributed to the public through the company GasSaver Corp. in about 1990 that was designed by Applicant and had an operation similar to the system disclosed in the SAE Technical Paper. The GasSaver system included a pump with a duck-bill valve. During low RPMs, the pump would draw catalyst through the low RPM line using the duck-bill valve pump, then through the high RPM bypass junction and to the engine. During high RPMs, the system was designed so that the engine would draw catalyst through the high RPM line, then through the high RPM bypass junction and to the engine. *See* Haskew Declaration, para. 4.

When the high RPM bypass valve allowed the suction of the engine to draw catalyst through the high RPM line, the duck-bill valve pump on the low RPM line continued to operate, but was ineffective due to the high velocity of the material moving through the high RPM line. If any sparging gas did flow through the low RPM line, it was significantly

9

reduced from the amount flowing in the low RPM line during low RPM cycles and did not flow consistently. *See* Haskew Declaration, para 4. The system was not designed to rely upon sparging gas flow from the low RPM line during high RPMs because such flow was not considered useful. As a result, any flow that occurred was merely an unintended, ineffective and inconsistent byproduct of the suction by the engine on the high RPM line.

Applicant's claim 16 recites a catalyst transport configured to "substantially maintain the first transport rate of sparging gas through the first sparging gas transport path when the second sparging gas transport path transports sparging gas at the second rate . . . ." Applicant's claim 29 recites "transporting a sparging gas through both the first transport path at substantially the first rate simultaneous with transporting sparging gas through a second transport path." The pending claims 16 and 29 avoid Applicant's recalled potential reference for this claim language.

Applicants respectfully request withdrawal of the anticipation rejections and subsequent allowance of all pending claims.

Regarding Doctrine of Equivalents

Applicants hereby declare that any amendments herein that are not specifically made for the purpose of patentability are made for other purposes, such as clarification, and that no such changes shall be construed as limiting the scope of the claims or the application of the Doctrine of Equivalents.
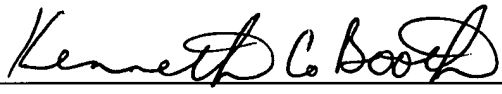
CONCLUSION

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

If any fees, including extension of time fees or additional claims fees, are due as a result of this response, please charge Deposit Account No. 19-0513. This authorization is intended to act as a constructive petition for an extension of time, should an extension of time be needed as a result of this response. The examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

Respectfully submitted,

Date: April 5, 2004   By_____

Kenneth C. Booth
Reg. No. 42,342

SCHMEISER, OLSEN & WATTS LLP
18 East University Drive, #101
Mesa, AZ 85201
(480) 655-0073